

Little Turkey Lake
LaGrange County
Supplemental Walleye Evaluation

Dates of Survey: September 16, 2008

Biologist: Neil D. Ledet, District 2 Fisheries Biologist

Objective: The objective of this survey was to evaluate survival of advanced walleye, especially those stocked in the fall of 2007 in accordance with work plan 300FW1F10D40617.

Methods: Fish collection effort consisted of 1 hour of pulsed D.C. nighttime electrofishing. Only walleye were collected using two dip netters and approximately 75% of the shoreline was covered. All fish collected were measured to the nearest 0.1 in total length (TL). Weights were taken from walleye to the nearest 0.01 pound. Scale samples were taken for age and growth determination.

Summary: The Little Turkey Lake Property Owner's Association funded walleye stockings for Little Turkey from 2005 through 2008. During this time period, between 1,000 (7.4 per acre) and 1,400 (10.4 per acre) advanced walleye fingerlings were stocked annually. These fish ranged from 6 to 8 in TL (Table 1).

During the 2008 fall survey, only 4 walleyes were collected. These fish ranged in length from 12.3 in TL (age-1) to 19.6 in TL (age-4). Only one of these was an age-1 fish from the 2007 stocking. The four year old walleye were likely migrants from an upstream stocking at Big Turkey. The water temperature at the time of the survey was 72 degrees F.

Similar fall fisheries surveys at seven other northern Indiana lakes have been conducted to evaluate the survival of advanced fall stocked walleye (Table 2). These include Big Turkey, Crooked, Pretty, Simonton, Sylvan, Wall and Winona lakes. Big Turkey Lake was stocked with 4.5 walleye per acre with an average fall electrofishing catch rate for age-1 walleye of 3.4 per hour. Crooked Lake is stocked with 10 advanced fall walleye per acre and the average electrofishing catch rate for age-1 walleye is 11.5 per hour. Pretty Lake was initially stocked with fall fingerlings in 2007 and had a catch rate of 30.7 age-1 walleye per hour in 2008. Simonton Lake is stocked with 6.1 advanced walleye per acre. The catch rate for age-1 Simonton Lake walleye

averages 5.6 per electrofishing hour. Wall Lake was stocked with advance walleye in 2005-07 and the average catch rate for age-1 walleye is 15.1 per hour. Sylvan and Winona lakes are stocked with 20 advanced walleye per acre with average electrofishing catch rates for age-1 walleye of 22.0 and 11.5 per hour respectively.

Based on the September 16 survey, the 2007 stocking of advance walleye into Little Turkey Lake failed. The walleye electrofishing catch for all ages were also poor. These results were very surprising. Based on personal communication and observations, walleye fishing on Little Turkey was exceptional in late May and June.

It is recommended that the DFW conducted fall electrofishing at Little Turkey Lake in 2009 to evaluate the 2008 stocking.

Submitted by: Neil D. Ledet, Fisheries Biologist

Date: 1/23/09

Approved by: Stu Shipman, North Region Fisheries Supervisor

Date: 1/23/09

Table 1. Little Turkey Lake Walleye Stockings, 2005 through 2008.

Date Stocked	# Stocked	Size (inches)
10/17/05	1,000	6-8
10/3/06	1,000	6-8
10/17/07	1,225	6-8
10/15/08	1,000	6-8

Note: These fish were purchased by the Little Turkey Lake Property Owner's Association.

Table 2. Advanced fall walleye stocked into Big Turkey, Crooked, Pretty, Simonton, Sylvan, Wall and Winona lakes and number of age 1 walleye collected per nighttime DC electrofishing hour, 2000 through 2007.

Lake / Year	Date Stocked	# Stocked	# Stocked Per Acre	Average Size/range (Inches)	# of Age 1 Walleye Collect Per Electrofishing Hour	Fall Sampled
Big Turkey (450 ac)						
2002	10/20	2,000	4.4	5 -7	0.5	2003
2003	11/01	2,100	4.7	5 -8	3.5	2004
2004	10/11	2,030	4.5	6 -8	5.3	2005
2005	10/16	2,030	4.5	6 -8	6.8	2006
2006	10/15	2,025	4.5	6-9	1.0	2007
Average #/hr					3.4	
Crooked (802 ac)						
2001	9/25	7,860	9.8	7.6	16.5	2002
2002	9/27	8,080	10.1	6.9	9.5	2003
2003	10/03	7,881	9.8	6.8	7.0	2004
2004	10/06	8,020	10.0	6.5	15.9	2005
2005	10/04	8,020	10.0	6.5	7.4	2006
2006	9/28	8,070	10.1	6.9	12.9	2007
Average #/hr					11.5	
Pretty Lake (184 ac)						
2007	10/07	2,280	12.4	8.9	30.7	2008
Simonton (299 ac)						
2000	10/24	2,000	6.7	5 - 8	8.5	2001
2001	10/11	2,000	6.7	5 - 8	3.2	2002
2002	10/01	2,200	7.4	5 - 8	5.7	2003
2003	10/21	2,000	6.7	5 - 8	2.4	2004
2004	10/11	2,000	6.7	5 - 8	8.1	2005

2005	10/10	1,500	5.0	5 - 8	9.4	2006
2006	10/4	1,220	4.1	6-8	2.1	2007
Average #/hr					5.6	

Table 2 cont.

Sylvan (669 ac)						
2001	9/25 & 10/03	12,620	18.9	6.3	24.3	2002
2002	10/10 & 10/16	13,380	20.0	6.0	13.7	2003
2003	10/08 & 10/24	13,200	19.3	6.0	14.3	2004
2004	10/08 & 10/12	13,380	20.0	7.2	16.1	2005
2005	10/06 & 10/11	13,380	20.0	6.8	34.9	2006
2006	9/29 & 10/3	13,380	20	6.7	27.0	2007
Average #/hr					22.0	
Wall (141 ac)						
2005	10/11	1,400	10	5-7	34.0	2006
2006	10/3	1,400	10	5-8	6.7	2007
2007	10/17	1,400	10	6-8	4.7	2008
Average #/hr					15.1	
Winona (562 ac)						
2001	9/27	10,740	19.1	6.6	9.9	2002
2002	10/02 & 10/16	11,240	20.0	6.3	15.7	2003
2003	10/01 & 10/03	11,300	20.1	7.5	25.4	2004
2004	10/01 & 10/12	11,240	20.0	6.4	1.8	2005
2005	10/07 & 10/11	11,240	20.0	7.3	4.6	2006
2006	9/26 & 10/3	11,240	20	7.0	12.0	2007
Average #/hr					11.6	

